

California Regional Water Quality Control Board
Santa Ana Region

March 12, 2004

ITEM: 12

SUBJECT: San Bernardino County Municipal Storm Water Permittees' Model Water Quality Management Plan Guidance (WQMP)

DISCUSSION:

On April 26, 2002, the Santa Ana Regional Water Quality Control Board (Board) adopted Order No. R8-2002-0012, NPDES No. CAS618036, Areawide Urban Storm Water Runoff Permit for San Bernardino County and the Incorporated Cities (SBC MS4 Permit). The SBC MS4 Permit regulates the discharge of storm water from municipal separate storm sewer systems (MS4) to waters of the U. S. This Board and other Southern California Regional Boards have adopted a number of similar MS4 permits. One provision of the MS4 permit requires permittees to develop and implement structural Best Management Practices (BMPs), sized according to the sizing criteria specified in the Permit, or other equivalent control measures to reduce/eliminate the discharge of pollutants from new developments and significant re-developments.

The 1996 MS4 Permit for Los Angeles County, adopted by the Los Angeles Regional Board, required the County to submit Standard Urban Storm Water Mitigation Plans (SUSMPs). The SUSMPs are plans that designate BMPs that must be used in specified categories of development projects. The County submitted SUSMPs, but the Regional Board approved the SUSMPs only after making revisions. The Executive Officer issued the revised SUSMPs on March 8, 2000 and upon appeal, the action was upheld in a precedential decision by the State Board in Order WQ-2000-11, on October 5, 2000.

With that precedential decision, the State Board required that the SUSMPs, or its equivalent, be included in all future Phase I MS4 permits. During the second permit term for the SBC MS4 permit (1996-01), the permittees developed model Guidelines for New Development and Redevelopment Projects. These Guidelines included structural and non-structural BMPs. When the San Bernardino County MS4 permittees initiated the renewal of the SBC MS4 Permit in September 2000, they stated their desire to require project proponents to submit a WQMP. Additionally, the permittees wanted to be able to make use of 'regional' or 'watershed' based treatment BMPs, to reduce the need for site-by-site or tract-by-tract treatment BMPs. The SBC MS4 permit included requirements consistent with the State Board decision and recognized the progress made by the SBC MS4 permittees including the need for a WQMP and the ability to make use of regional treatment BMPs.

The MS4 permit required that the permittees review their existing BMPs for new developments and submit by January 1, 2004 a revised Water Quality Management Plan (WQMP) to address urban runoff from new and significant redevelopment projects.

On December 30, 2003, the permittees submitted the December 2003 version of the WQMP. The submittal included a summary of the comments they received and their responses to an earlier preliminary draft of the WQMP.

On January 9, 2004 staff notified interested parties by electronic mail of the availability of the document and provided a link to the WQMP and other related documents. On February 17, 2004, staff provided comments to the County, the Principal Permittee. Other interested parties have also provided comments on the December 2003 WQMP. These comments are included as attachments to this Staff Report. Staff's comments provided a list of discrepancies, deficiencies, and items requiring further clarification in the December 2003 WQMP. Staff also forwarded this comment letter and the link to the permittee-submitted documents and comments to over 200 interested parties who have signed up to be notified by email of developments in the SBC MS4 Permit. These comments, the draft WQMP, and other permittee submittals are posted on our website at <http://www.swrcb.ca.gov/rwqcb8/html/sb-permittee.html> .

The SBC MS4 Permit states that by June 1, 2004, the submitted WQMP must be approved by the Executive Officer as providing an equivalent or superior degree of treatment as structural treatment BMPs at each new development and significant redevelopment or those sized, structural treatment BMPs will be required. The process that must be followed for the approval of submittals under the SBC MS4 Permit is identified in Section XVIII.1 (Provisions). "All reports submitted by the permittees as per the requirements in this Order for the approval of the Executive Officer shall be publicly noticed and made available on the Regional Board's website, or through other means, for public review and comments. The Executive Officer shall consider all comments received prior to approval of the reports. Any unresolved significant issues shall be scheduled for a public hearing at a Regional Board meeting prior to approval by the Executive Officer."

At the March 12, 2004 workshop, staff will provide a brief overview of the proposed WQMP, staff's comments on the plan, comments received to date, and seek comments from all interested parties. Subsequent meetings will be scheduled with interested parties to discuss these comments. Any unresolved significant issues will be presented to the Board at a later date.

Item 12 Staff Report (attachments)

The following attachments are included:

1. **Staff's February 17, 2004 Comments**
2. **NRDC's February 12, 2004 Comments**
3. **CICWQ's February 13, Comments**
4. **City of Ontario's February 13, 2003 Comments**



California Regional Water Quality Control Board

Santa Ana Region



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Arnold Schwarzenegger
Governor

February 17, 2004

Mr. Ken A. Miller, P.E.
Director of Public Works
County of San Bernardino
Department of Public Works – Flood Control District
825 East Third Street
San Bernardino, CA 92415-0835

COMMENTS ON THE DECEMBER 2003 MODEL WATER QUALITY MANAGEMENT PLAN GUIDANCE FOR SAN BERNARDINO COUNTY AND THE INCORPORATED CITIES OF SAN BERNARDINO COUNTY

Dear Mr. Miller:

Enclosed are our comments on the draft Model Water Quality Management Plan Guidance submitted to us on December 30, 2003. These comments, along with all other comments received, will also be posted on our website.

To view or download a copy of the comments, please access our website at <http://www.swrcb.ca.gov/rwqcb8/html/sb-permittee.html>

If you have any questions, please call me at (909) 782-4419, Muhammad Bashir at (909) 320-6396, or Mary Bartholomew at (909) 321-4586.

Sincerely,

Milasol Gaslan, Chief
Inland Storm Water Unit

Enclosures: Comments of the December 2003 Water Quality Management Plan
Site Design Checklist and LID Calculations Worksheet

Cc: San Bernardino County Co-permittees
NRDC – David Beckman/Dan Gildor
Orange County Coastkeeper – Garry Brown
Defend the Bay – Bob Caustin
Construction Industry Coalition on Water Quality – Tim Piasky
WSPA – Steven Arita
Richard R. Horner

COMMENTS ON THE SAN BERNARDINO COUNTY STORM WATER PROGRAM'S DECEMBER 2003 MODEL WATER QUALITY MANAGEMENT PLAN GUIDANCE

I. General Comments:

01. We realize that it is a resource intensive process to develop a model water quality management plan (WQMP) that is acceptable to the co-permittees and other stakeholders. Recently, the Orange County MS4 permittees went through this process. On September 26, 2003, the Regional Board authorized the Executive Officer to approve the WQMP for Orange County MS4 permittees. Many of the site design, source control and treatment control measures included in the Orange County WQMP are universally applicable to other projects. We had recommended to the San Bernardino County permittees that the approved WQMP for Orange County be used as a template for developing the San Bernardino County WQMP. San Bernardino County permittees have the same consulting firm that helped Orange County with their WQMP, Camp Dresser & McKee, Inc., to help them with their WQMP. The permittees and their consultants were fully aware of the Orange County WQMP. The permittees could have saved a significant amount of resources by using the Orange County WQMP as a guide for the program. However, it appears that the WQMP that was submitted by the permittees did not benefit much from the approved Orange County WQMP. The submitted plan neither meets the goals and objectives of the WQMP specified in the Permit (Permit = Order No. R8-2002-0012) nor has it included appropriate sections of the Orange County WQMP. This forces us and other interested parties to dedicate considerable amount of resources to review and comment on the inadequacy of the submitted WQMP.
02. We had also recommended that all stakeholders be invited to participate in the WQMP development process from the early stages of the process. However, the comments received from NRDC and Defend the Bay indicate that there was only limited public participation.
03. An inherent weakness in considering individual projects as they are proposed at different times and at scattered locations is that the management plan prescribed for any one site occurs in isolation from other watershed sites and activities. A WQMP should consider the cumulative impacts of all the projects. Section XII of the Permit requires the permittees to minimize the short and long-term impacts on receiving water quality from new developments and re-developments within its jurisdiction. Section XII.A requires the permittees to review/revise their planning documents such as CEQA and General Plan. The progress report on this requirement is to be submitted with the 2003-04 annual report. A review of the 2002-03 annual report indicates that a number of cities still have not included storm water concerns in their documents related to CEQA, General Plan, Specific Plan and Master Plans. For an effective new development/redevelopment program, it should start with the planning process.

If the permittees are not considering storm water impacts during the planning process, and through each stage of the project, it may not be possible to implement cost-effective programs for the various stages of the project and to consider the cumulative impacts resulting from various projects within the watershed.

04. The WQMP should be developed in conjunction with the Permit requirements and the commitments made by the permittees in the Report of Waste Discharge (ROWD), including the Municipal Storm Water Management Program (MSWMP). It appears that the permittees have not considered the commitments made in the MSWMP in developing the WQMP.

II. Specific Comments:

01. Table of Contents

Please correct the page number for Section 1.3; it begins on page 1-2, not 1-3.

02. Executive Summary

- a. Page E-1, first paragraph, second and third sentences: The Permit requires the WQMP to address pollutants from all phases of a new development and significant redevelopment project, not merely post-construction best management practices (BMPs).
- b. Page E-1, 2nd paragraph, the first bulleted item: Please note that the best available technology (BAT) and best conventional technology (BCT) standards are applicable to all phases of construction.
- c. Page E-1, 2nd paragraph, the bulleted items: We recommend that the following be added (second bulleted item is a revision) to the list of items.
 - The project shall consider low impact development principles in the use of site design BMPs (refer to pages 2-11 to 2-13).
 - The discharge of any listed pollutant to a water body listed on the 303(d) list shall not cause or contribute to a lowering of water quality standards which include water quality objectives, beneficial uses, and the State's policy on anti-degradation.
 - The discharge of any listed pollutant to an impaired water body on the 303(d) list shall require an offset (e.g., no net loading) for any additional loading from the proposed project to ensure no further degradation of the impaired water body.
- d. Page E-1, last paragraph, last two sentences: Please note that once the WQMP is approved, it becomes an enforceable part of the Permit and it

shall be applicable to all permittees. These two sentences must be revised to reflect this.

03. Section 1.1, Introduction, Page 1-1:

- a. All references to “post-construction BMPs” should be replaced with appropriate wording to include “all phases of a project” (see 2.a., above).
- b. The introduction should have more emphasis on design principles using low impact development.
- c. Bulleted items: Revise as per 2.c., above.

04. Section 1.2, Page 1-1:

- a. First Paragraph: We recommend that a WQMP be required for all new and redevelopment projects.
- b. 1st sentence: Please change the sentence structure to indicate that the project proponents must develop, submit, and implement a WQMP.

05. Section 1.3, WQMP Development Approach, Page 1-2:

- a. Figure 1-1, Step 1: We recommend requiring a WQMP for all projects.
- b. Steps 2, 3, 4 and 5: These steps should reference the appropriate tables and other attachments where this information is provided.
- c. Steps 5, 6 and 7: If the project proponent is proposing to participate in an approved regional water quality control program, that program must be identified.
- d. Page 1-3: Please indicate that a WQMP is also required for public agency projects.

06. Section 2.1, first bullet, Page 2-1: In many cases the project proponent is different from the property owner. Therefore, it is advisable to have information about the project proponent and the property owner. Please require property owner information if different from owner of the project.

07. Section 2.2, Watershed Impact of Project: In addition to considering the project impact on the watershed, the cumulative impacts should also be considered. We also recommend that this discussion be moved to the end of this subsection. Section 2.2.1 should be 2.2; Section 2.2.2 should be 2.2.1 and Section 2.2 should be moved to 2.2.2.

08. Section 2.2.1, Identify Pollutants of Concern, Page 2-1:

- a. Attachment C includes a discussion on pesticides, trash and debris and oxygen-demanding substances. However, these are not included in Table 2-1; please revise Table 2-1 to include these pollutants.
- b. First sentence, last paragraph, Page 2-1: It is not clear what is the “special consideration” required for pollutants to impaired water bodies; please describe “special consideration”.
- c. First sentence, last paragraph, Page 2-1: Please replace the reference to “impairment of beneficial uses” with “impairment of water quality standards”.

09. Section 2.2.2, Identify Hydrologic Conditions of Concern, Page 2-2:

- a. Second sentence in the 1st paragraph of this subsection states, “Under certain circumstances, changes could also result in the reduction in the amount of available sediment for transport; storm flows could fill this sediment-carrying capacity by eroding a downstream channel.” We recommend that you include a course of action to remedy this situation. For example, introduce the concept of integrated storm water controls throughout the urban landscape using principles included in publications such as Start at the Source (1999) and Low Impact Development Design Strategies (1999). Section 2.3.2 has identified some of these ideas. One of the goals of the WQMP should be to maintain the geomorphic equilibrium in the channel.
- b. Section 2.2.2, Pages 2-2 and 2-3: The criteria (Criterion A and Criterion B) for determination of hydrologic conditions of concern seem to be predicated upon some non-existent documents. Please note that all the permittees do not have a Master Plan or other documents that fully address the cumulative hydrologic impacts of proposed projects (see Page 2-13, Table 2-2 of the 2002-03 Annual Report).

10. Section 2.3, Best Management Practices, Page 2-3:

- a. Please stress the importance of site design principles early on in the project.
- b. First paragraph, last sentence: Replace “an exceedance of receiving water quality objectives” with “an exceedance of water quality standards”.
- c. Last paragraph, last sentence: Only Table 2-2 is referenced for examples of required site design BMPs. Please include a reference to the site design BMPs listed on Pages 2-11 and 2-12.

11. Page 2-6. Section 2.3.1, Site Design and Source Control BMPs:

“For developments with POA or residential projects of more than fifty (50) dwelling units, project conditions of approval will require that the POA provide environmental awareness education materials.” The project proponent should be responsible for the education materials where there is no POA or until the POA is established.

12. Page 2-6. Section 2.3.1, Site Design and Source Control BMPs – Administrative BMPs – Education for Property Owners, Tenants, and Occupants

Since the permittees have already developed public information brochures, it is a good idea to include copies of these brochures as attachments to the WQMP.

13. Section 2.3.1, Page 2-6, Activity Restrictions, last sentence: Please note that the pesticide applicators are licensed by the Department of Pesticide Regulations and not by the Department of Food and Agriculture.

14. Section 2.3.1, Page 2-7, Design BMPs, Landscape Planning:

- a. Either a copy of the County Administrative Design Guidelines should be included with the WQMP as an attachment or indicate where a copy could be obtained.
- b. This section should include a discussion on hillside landscaping, especially protection of slopes.
- c. Landscape planning should consider designing a vegetative barrier and/or preserving natural vegetative barrier along the property boundary and interior watercourses to act as a storm water filter, where appropriate and feasible. This section should also include discussion on using native and/or drought resistant plants.

15. Section 2.3.1, Page 2-7, Design BMPs, Efficient Irrigation System:

- a. The irrigation systems should consider the use of flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- b. Other devices described in the current New Development Guidelines such as programmable irrigation timers (for short cycles), water sensors, etc., should be included in this discussion.

16. Section 2. 3.1, Page 2-7 Insert provisions for protection of slopes and channels as follow (these are taken from the Orange County WQMP):

1. Convey runoff safely from the tops of slopes.
2. Avoid disturbing steep or unstable slopes.
3. Avoid disturbing natural channels
4. Install permanent stabilization BMPs on disturbed slopes as quickly as possible.
5. Vegetate slopes with native or drought tolerant vegetation.
6. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

7. Install permanent stabilization BMPs in channel crossings as quickly as possible and ensure that increases in runoff velocity and frequency caused by the project do not erode the channel.
 8. Other design principles those are comparable and equally effective.
17. Section 2.3.1, Page 2-7, Storm Drain Signage: These signs must be maintained and a responsible party for its maintenance should be identified in the WQMP.
 18. Section 2.3.1, Page 2-8, Energy Dissipator:
 - a. Add “Energy dissipators shall be installed in such a way as to minimize impact to receiving waters.”

Riprap is the only design structure included here. Riprap and other concrete-based methods may not be the most protective of water quality. Other methods for managing flow velocity and volume must be considered. A good reference for considering other measures is Ann Riley's book that discusses alternatives to concrete (see following citation).

“A Primer on Stream and River Protection for the Regulator and Program Manager,” by Ann L. Riley, San Francisco Regional Board. The Primer can be accessed on the internet at www.swrcb.ca.gov/rwqcb2/Agenda/04-16-03/Stream%20Protection%20Circular.pdf.

19. Section 2.3.1, Page 2-8, Areas and Activity Control BMPs, Fueling Areas:
 - a. “Spilled material within the fuel dispensing area must be prohibited from draining to the street or storm drain system.” The material should also be prohibited from draining off-site.
 - b. Specify that fueling areas should drain to the project treatment control BMPs, prior to off-site discharge.
20. Section 2.3.1, Page 2-9, Trash Storage Areas and Litter Control:

Add the following: “Trash area drains, if any, must not be allowed to discharge offsite or connected to the municipal storm drain system.”

21. Section 2.3.1, Page 2-9, Maintenance Bays and Docks:

Last sentence – Please revise to state “Below-grade loading docks from grocery stores and warehouse/distribution centers of fresh food items should drain through water quality inlets, or to an engineered infiltration system, or an equally effective alternative reviewed and approved by the Agency”.

22. Section 2.3.1, Page 2-9, Vehicle Washing Areas, First Paragraph, last sentence: Please revise to state "Wash and rinse waters from this area must either be directed to the sanitary sewer (with prior approval of the sewer agency), to an engineered filtration system, or an equally effective alternative reviewed and approved by the Agency".
23. Section 2.3.1, Page 2-10, Outdoor Material Storage Area:
- Add the following language: " Any storm water retained within the containment structures must not be discharged to the street or to the storm drain system."
24. Section 2.3.1, Page 2-10, Outdoor Work Areas:
- "Where vehicle or equipment repair/maintenance occurs, impermeable berms, trench drains, or containment structures shall be provided around the repair area bays to eliminate or reduce spilled materials and wash-down waters from entering the storm drain system."
- Add the following language: " Any storm water retained within the containment structures must not be discharged to the street or the storm drain system."
25. Section 2.3.1, Page 2-10, Outdoor Processing Areas
- Add the following language: "Outdoor process equipment operations such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the permittees shall adhere to the following requirements:
1. Cover or enclose areas that would be sources of pollutants, or slope the area toward a sump that will provide infiltration or evaporation with no discharge; or, if there are no other alternatives, discharge of non-stormwater flow to the sanitary sewer may be considered only when allowed by the local sewer agency through a permitted connection.
 2. Grade or berm area to prevent run-on from surrounding areas.
 3. Installation of storm drains in areas of equipment repair is prohibited.
 4. Other comparable or equally effective features that prevent unpermitted discharges to the municipal storm drain system.
26. Section 2.3.1, Page 2-10, Street Sweeping Private Streets and Parking Lots:
- Specify that sweeping should take place on a regular basis and in the late summer or early fall prior to the onset of rainy season.
27. Section 2.3.1, Page 2-10, Wash Water Controls for Food Preparation Areas:

Signs should be posted stating the prohibition on discharging of washwater to the storm drain system.

28. Section 2.3.1, Page 2-11, Common Area Catch Basin Inspection:

- a. Replace all references to catch basins with “drainage facilities (inlets, open channels and basins)”.
- b. Specify that annual inspections should take place in the late summer or early fall.
- c. Require that the responsible party for post-construction operation and maintenance of drainage facilities shall evaluate all portions of the drainage facilities annually to determine the need for increasing the inspection and maintenance frequency. This information shall be reported to the Agency.
- d. Catch basins must be inspected annually and cleaned on an “as needed” basis and when they are filled 25% or more.

29. Section 2.3.2, Page 2-11. Site Design BMPs

“These same practices, because they reduce the volume and usually the rate of runoff, also have the benefit of reducing the amount of stormwater that must be treated before being discharged or to be treated in regional facilities.”

Add the following language: These low impact design principles offer an innovative approach to urban stormwater management by uniformly or strategically integrating stormwater controls throughout the urban landscape. Useful resources for applying these principles include Start at the Source (1999), and Low Impact Development Design Strategies (1999). “

30. Section 2.3.2.1, Page 2-11. Minimize Stormwater Runoff, Minimize Project’s Impervious Footprint, and Conserve Natural Areas:

Rain gardens are another way to infiltrate water and may be applied on individual lots or larger areas.

31. Section 2.3.2.1, Page 2-12, Maximize the permeable area: Add the following paragraph:

“Runoff from developed areas may be reduced by using alternative materials or surfaces with a lower Coefficient of Runoff, or “C Factor”. The C factor is a representation of the ability of a surface to produce runoff. Surfaces that provide higher runoff volumes are represented by higher C factors. By incorporating more pervious, lower C factor surfaces into a development, lower volumes of runoff will be produced.

Lower volumes and rates of runoff translate directly to lowering treatment requirements.

32. Section 2.3.2.1, Page 2-12, Conserve natural areas: If the County has a Multi-species Habitat and Conservation Plan, it must be referenced here.
33. Section 2.3.3, Page 2-14, Treatment Control BMPs: Delete the first paragraph and replace with the following paragraphs:

“Minimizing a development’s detrimental effects on water quality can be most effectively achieved using a combination of Site Design, Source Control and Treatment Control BMPs. Where projects have been designed to eliminate or reduce the introduction of expected pollutants of concern into the municipal storm drain system or the receiving waters through the implementation of Site Design and Source Control stormwater BMPs, the development may still have the potential for pollutants of concern to enter the municipal storm drain system or receiving waters that must be addressed by Treatment Control BMPs.

WQMP-required projects shall be designed to remove pollutants of concern from the municipal storm drain system to achieve the appropriate standard, as specified in the Third Term Permit, through the incorporation and implementation of Treatment Control BMPs.

On-site Treatment Control BMPs are necessary to meet the requirements in this section, WQMP-required projects shall implement a single or combination of stormwater treatment BMPs that will remove anticipated pollutants of concern from site runoff and achieve the appropriate standard. Treatment Control BMPs must be implemented unless a waiver is granted to the project by the Agency, based on the infeasibility of any Treatment Control BMPs and participation in an offset program.

Where approved regional or watershed management programs are available within the downstream watershed to address the pollutants of concern from new development and significant redevelopment, a project may participate in a regional or watershed program. At this time, no regional or watershed management programs are being proposed as part of this Model WQMP for Regional Board staff approval. Local implementation plans may include proposals for sub-regional programs for Regional Board staff approval. The regional or sub-regional plans are subject to public review and comments and may be presented to the Regional Board for consideration.”

34. Section 2.3.3, Page 2-14, Treatment Control BMPs:

CASQA handbook, New Development and Redevelopment, Appendix C, provides pollutant removal effectiveness information for multiple BMPs. This information would be useful to reference in this section as well to assist the applicant in the selection of site-specific BMPs.

35. Section 2.3.3, Page 2-14, Treatment Control BMPs:
- Please include a selection procedure and a pollutant-based treatment BMP selection matrix to guide project proponents.
 - Clarify that Class V requirements would apply if the infiltration BMP meets definition of the Class V disposal wells.
 - Please identify appropriate agency and state when coordination with the local water purveyor or agencies may be required to ensure that proposed infiltration BMPs do not cause or contribute to a degradation of groundwater quality.
 - A discussion of limitations and guidance for infiltration practices is contained in Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration, Report No. EPA/600/R-94-051, USEPA (1994). Please include this as a reference.
36. Section 2.3.3, Page 2-15, Flow Based Treatment Control BMPs and Volume Based Treatment Control BMPs: These sections need a better introduction for the discussions that follow.
37. Section 2.3.3, Page 2-15, Bioretention
- “Bioretentions require frequent landscape maintenance, including measures to ensure that the area is functioning properly, as well as maintenance of the landscaping on the practice.” Please clarify “landscaping on the practice.”
38. Section 2.3.3, Page 2-16, Infiltration Basin: Please include a brief description of pre-treatment BMPs.
39. Section 2.3.3, Page 2-17, Infiltration Trench:
- “Infiltration basins should not be put into operation until the upstream tributary area is stabilized.” If the reference here to infiltration basin is correct, this sentence should be in the previous section.
40. Section 2.3.3.1, Page 2-18: Volume Based Design: Please include sample calculations in an attachment or appendix.
41. Section 2.3.4, Page 2-19, Equivalent Treatment Control Alternatives:
- Please provide an explanation of an equivalent off-site treatment control compared to regional or sub-regional treatment systems.
 - The Guidance states that “...equivalent treatment may be provided off site when approved by the Agency,” and then lists certain conditions when equivalent treatment can be used. However, there are certain circumstances and site conditions, which would make off-site treatment

unacceptable. For example, if the site drains directly to sensitive habitat, or to impaired water bodies; or, if discharge from the site leads to or causes localized water quality impairment or an increase in loading of constituents of concern.

The Guidance should list conditions and circumstances under which equivalent off-site treatment cannot be used. Further, the Guidance should state the appropriate reporting requirement to Regional Board staff for co-permittee approval of an equivalent treatment system.

42. Section 2.4, Page 2-20, Operations and Maintenance:

- a. "Identification of the responsible parties for O&M, including a written agreement with the entities responsible for O&M."

Specify the requirements of identification (e.g. name, address, phone number, contact person, etc).

- b. Please include a discussion of various acceptable long-term operation and maintenance mechanisms. Include these options in the WQMP template for the project proponent to choose.

43. Page 2-20: Include permit closeout requirements for a verification process to ensure that the provision of the Project WQMP have been completed prior to issuance of certificates of use and occupancy. Please refer to language from Orange County WQMP, Section 7.II-5.2.

44. Section 3, Page 3-1, Regional-Based Water Quality Control: Any regional or sub-regional water quality treatment control systems should be submitted to the Regional Board office for approval. These will be publicly noticed and if there are no significant comments, and if the system meets the Permit requirements, the Executive Officer will approve these systems. In case of significant controversies, the Regional Board will conduct a public hearing.

45. Section 4.1, Page 4-1, Changes in Site Development:

When there are changes in the site development plans, the WQMP must be updated. For significant changes, the WQMP should be re-certified by the Agency.

46. Section 4.2, Page 4-1, Changes in Site Ownership: Include a discussion on how responsibilities for implementing the WQMP provisions will be transferred. Also, please include a template for an agreement between the current property owner and the new property owner for transfer of responsibility.

47. Section 1.1, Page A-5, Project Information:

“Name of property owner.”

Although the address of the property owner is required on the title page, it should also be included in here along with a contact number for the owner.

48. Section 3.1, Page A-6, Structural Control BMPs:
 - a. “Complete the following selection table for Source Control BMPs.” Provide instruction on how to complete the table. For example, “check the box(es) of selected BMPs.”
 - b. Is the header intended to be Source Control BMPs rather than Structural Control BMPs?
 - c. The source control BMPs selection matrix is not complete. Please review for completeness.
49. Section 3.2, Page A-7, Site Design BMPs: The site design principles should be listed. We suggest the attached format excerpted from the Prince George’s County, MD, Low Impact Development Design Strategies: An integrated Design Approach. Largo Maryland.
50. Section 3.3, Page A-7, Treatment Control BMPs:
 - a. “Complete the following table for Treatment Control BMPs.” Provide instruction on how to complete the table. For example, “check the box(es) of selected BMPs.”
 - b. Provide detailed descriptions on the “location”, implementation, “installation, long-term O&M” of planned Treatment Control BMPs.
51. Section 4.1, Page A-10, O&M Description and Schedule:
 - a. There are two Section 4.1. This section is either 4.1.3 or 4.2. Please revise.
 - b. “Provide the party or parties that will be responsible for each BMP O&M.”
 - c. Indicate that for each responsible party, information should include the responsible party’s name and address and a contact name and phone number.
52. Section 5.1, Page A-10, Funding:

“Indicate funding sources or sources for O&M for this project.” Specify that, for each funding source, information should include the responsible party’s name and address and a contact name and phone number.

53. Section 6.1, Page A-11, Certification:

In Section 6, or elsewhere in the document, define signatory qualifications. We would prefer the owner unless a written designation by the owner allows a designee to sign on behalf of the owner.

Please include the following language in the Certification.

“This Water Quality Management Plan has been prepared for (Owner/Developer Name) by (Consulting /Engineering Firm Name). It is intended to comply with the requirements of the City of (name city or county) for Tract/Parcel Map No. _____, Condition Number(s) _____ requiring the preparation of a Water Quality Management Plan (WQMP). The undersigned is aware that Best Management Practices (BMPs) are enforceable pursuant to the City’s/County’s Water Quality Ordinance No. _____. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with San Bernardino County’s Municipal Stormwater Management Program and the intent of the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors in interest and the city/county shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity. “

54. Please include a glossary of acronyms and terms used in the WQMP document.



NATURAL RESOURCES DEFENSE COUNCIL

February 12, 2004

Via Federal Express

Mr. Milasol Gaslan
Chief, Inland Storm Water Unit
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Mr. Matt Yeager
San Bernardino County Flood Control District
825 E. Third St.
San Bernardino, CA 92415-0835

**Re: Comments on Model Water Quality Management Plan for San
Bernardino County and the Incorporated Cities of San Bernardino
County**

Dear Sirs:

On behalf of Defend the Bay and the Natural Resources Defense Council, we wish to submit the following comments on San Bernardino County's submittal of revisions to the Model Water Quality Management Plan (the "Model"). As you may know, the Inland Empire, consisting of San Bernardino and Riverside Counties, is the fastest growing region in the State. See Southern California Association of Governments, *Census Data* at <http://www.seag.ca.gov/census>. The unchecked growth experienced by these two counties has combined with "helter-skelter development" to leave the Inland Empire as the nation's worst example of urban sprawl. Scott Gold and Massie Ritsch, "Swallowed by Urban Sprawl Relocating to Inland Empire Puts People in the Midst of What They Fled, Researchers Find," *Los Angeles Times* B1 (Oct. 18, 2002). As acres of open space are converted to residential and commercial use, San Bernardino County faces a golden opportunity to address the State's most important water quality issue - storm water runoff—at the root of the problem rather than having to apply more costly and less effective solutions that address the symptoms of the problem down the line. Accordingly, it is crucial that the Regional Board require that the County fully comply with Order No. R8-2002-0012 (NPDES Permit No. CAS618036) (the "Permit") by presenting a specific and robust Model WQMP.

The County's submission, however, falls short of this standard. As outlined in the comments below, the Model fatally lacks clarity and specificity, leaving too much

to the imagination of project applicants and application reviewers. As such, the Model cannot assure compliance with the Permit and worse, *does* assure that water quality in San Bernardino will continue to degrade.

Moreover, the Model falls below the standard set by the recently approved model WQMP for Orange County, demonstrating not only that the Model is inadequate in absolute terms but also that it is inadequate in relative terms. The Orange County model WQMP sets standards for waters downstream of San Bernardino County that are, as a whole, more protective of water quality. Yet, pollution from San Bernardino County may swamp the gains that a well - implemented model WQMP in Orange County would yield. To avoid such a situation, the Regional Board, whose jurisdiction is watershed-based, must require the County to achieve at least an equivalent standard of control as does Orange County.

For these general and the following specific reasons, the Regional Board, therefore, should require the County to fully address the following comments and re-submit an adequate Model:

Section 1.1 (Introduction):

The Model aptly states that an effective and acceptable WQMP must meet the requirement that the discharge of any listed pollutant to an impaired water body on the 303(d) list shall not cause or contribute to an exceedance of receiving water quality objectives. The Model, however, fails to state anywhere that the permittees must ensure that the discharge of *any* pollutant must not cause or contribute to an exceedance of *any* receiving water quality standard. Permit § IV. The Model must relate to the developer the process by which such a determination will be made so that the resulting project WQMP will take into account the cumulative impacts of a built-out watershed. Absent such a discussion, developers will not be able to formulate plans to accommodate these water quality concerns, leading to an overall degradation of San Bernardino County waters until such time as all the waters will be impaired. This reason alone is sufficient to reject the Model.

Section 2.2.1 (Identifying pollutants of concern):

In identifying the pollutants of concern generated by a project, the Model only considers the pollutants expected from the type of development and land use. To fully characterize the pollutants of concern from a project, however, site-specific conditions must be considered. These conditions include the presence of legacy pesticides, nutrients, or hazardous materials in the soils. A project applicant, therefore, must be required to include a discussion of such site-specific conditions.

Furthermore, Table 2-1 is inadequate for determining the pollutants of concern for a project. First of all, the table omits any reference to pesticides and oxygen-demanding substances, even though Attachment C specifically addresses these types of pollutants as pollutants of concern. Second, the pollutants associated with runoff from specific land-use types

have long been established through years of scientific research, beginning with the NURP process two decades ago. It is inappropriate for the County to alter Table 2-1 to list the land-use types as only "potential" sources of the associated pollutants, especially absent any citation to supporting scientific research. As the Regional Board staff have commented before, "it should take a very convincing argument ... to remove a potential pollutant usually associated with a land use type." Letter of Mark E. Smythe, Chief Coastal Storm Water Unit, Santa Ana Regional Water Quality Control Board to Chris Crompton, County of Orange PFRD of May 21, 2003 at 6. The County presents no argument to support its modifications. Nor should the label "potential" be used given that it implies an opportunity to alter the table based on site-specific conditions. When years of research establish that a pollutant is associated with a particular land use type, any development or significant redevelopment must address that pollutant. Accordingly, the Board should not accept Table 2-1.

Lastly, the Model fails to require the applicant to consider *all* downstream waters. It is meaningless for an applicant to consider only the immediate receiving water and the impacts on that water when the flows from the project will invariably impact waters downstream from that receiving water as well. Accordingly, the Model is inadequate in protecting water quality and should be disapproved.

Section 2.2.2 (Identifying hydrologic conditions of concern):

Overall, it is difficult to understand how this section protects water quality and maintains pre-project hydrologic conditions. First, the Model sets forth *a subjective* standard of "significance," which the Model fails to define in any manner and which lacks all clarity in implementation (the standard, moreover, is inappropriate given that the Permit requires the permittees to minimize hydrologic changes resulting from new development and redevelopment). Second, the objective criteria that the County sets forth fall short of establishing any clear and defensible standard. For instance, Criterion A exempts projects that discharge runoff into an "improved" reach of an MS4. The Model, however, does not define "improved," leaving one to question whether a partially-improved or partially-lined channel counts or whether the channel must be fully lined for the criterion to be met. Additionally, the criterion fails to consider downstream reaches and the potential impact of upstream discharges on them, potentially exempting hydrologic analysis based only on the nature of the most proximate channel. Likewise, Criterion B exempts discharges in accordance with a locally approved and adopted Master Plan of Drainage and Water Quality. There is no assurance, however, of the existence of any such plans, nor that those plans have been developed in compliance with the terms of the Permit and the CWA. There is, moreover, no ability for the public to comment on such plans (and even if there were, the logistical barriers for such public participation are formidable, rendering this scattered approach inconsistent with the principles set forth in 40 C.F.R. Part 25). Where compliance is buried by reference to such unseen plans, it becomes impossible to evaluate the Model's effectiveness.

Third, while the Model specifies that project applicants must supply sufficient information to demonstrate that the project will not adversely impact the hydrologic regime, the

Model fails to require the project proponent to conduct an actual drainage study that will quantify and qualify the condition of concern rather than merely identify it. Such a study is critical in later evaluating the effectiveness of the BMPs applied. Similarly, the Model again introduces a tremendous amount of subjectivity in setting the standard of proof as having to demonstrate that the project "will not *adversely impact*" the hydrologic regime. A more precise standard would require the applicant to demonstrate that pre-project hydrologic conditions are maintained.

Overall, the Model should present a much more specific and stepwise analytical procedure for evaluating hydrological issues of concern in order to ensure that the project WQMP minimizes those issues of concerns. Absent such an analytical process, the Model cannot be considered to be sufficiently protective of water quality to be approved of by the Board.

Section 2.3 (Best management practices):

The Model states that "All projects shall include site design BMPs." *See* Model at 2-3. This statement is confusing and ambiguous as it does not state which site design BMPs are required, leaving the impression that a single site design BMP may be sufficient. Subsequent language states that site design BMPs be used "where appropriate," yet the Model fails to define what "appropriate" means, leaving open-ended and up to debate the determination of which site design BMPs must be included in a project WQMP to be approved. Instead, the Model should be consistent throughout the discussion of site design BMPs, making explicit what is currently implicit-that all site design BMPs must be incorporated into a project except where, due to sitespecific reasons, a BMP cannot apply. In that scenario, the project proponent must justify and the Agency should approve the omission of BMPs. At issue is whether the Model provides sufficient specificity for both developers and application reviewers to know what is required. As it stands now, the Model is inconsistent and wholly lacks sufficient detail and specifics.

Section 2.3.1 (Source Control BMPs):

The Model contributes to even greater confusion by referring to "Design BMPs" as a subset of source control BMPs. Source control and site design BMPs are separate categories of BMPs and the Model must maintain that distinction to minimize confusion. Accordingly, Section 2.3.1 should be titled, simply, "Source Control BMPs" and the "design BMPs," which are a subset of source control BMPs distinct from site design BMPs, must be redesignated as "structural" or "system" BMPs.

Specific comments regarding individual BMPs follows:

- **Storm Drain Signage:** The BMP should also require that signs and prohibitive language and/or graphical icons that prohibit illegal dumping at public access points along channels and creeks within the project area be posted. The legibility of signs and drain stencils must also be maintained.

- Protection of slopes and channels: The Model must include BMPs to decrease the potential for erosion of slopes and channels and include provisions for landscaping hillsides.
- Street Sweeping Private Streets and Parking lots: The BMP should specify when during the year private streets and parking lots must be swept, such as "in late summer or early fall, prior to the start of the rainy season."
- Retail Gas Outlets: The Model should require BMPs regarding Retail Gas Outlets.

Section 2.3.3 (Treatment Control BMPs):

Section 2.3.3 starts out by stating that treatment control BMPs must be selected with respect to identified pollutants of concern, but neglects to mention hydrologic conditions of concern. The language, accordingly, must be changed to comply with the Permit terms. Language must be added also that treatment control BMPs must be located to treat the required runoff volume or flow prior to discharging to any receiving water.

Section 2.3.3.1 (Flow-Based Design):

Section 2.3.3.1 specifies that the Rational Formula ($Q=CiA$) be used to calculate the flow for which a flow-based BMP should be designed. The Model's reliance on this formula is outdated and overly simplistic. It is commonly known that the Formula incorporates serious oversimplifications and ignorance of certain factors that affect the actual hydrologic process that occurs at a particular site. At the very least, the Board should require the County to conduct an analysis to evaluate the use of this formula versus different methodologies for determining the flow volumes to be treated.

Section 2.3.4 (Equivalent Treatment Control Alternatives):

Section 2.3.4 provides that if on-site treatment control BMPs are determined to be infeasible or impracticable, equivalent treatment *may* be provided off-site when approved by the permittee. The Model's language, however, must *require* that equivalent off-site treatment be provided. Any waiver of on-site treatment control must be strongly linked to an equivalent reduction of pollution elsewhere in the watershed in order to comply with the Permit terms. The Model's language is also flawed in that the Model fails to specify the standard of proof by which the permitting agency will determine that on-site treatment is infeasible or impracticable. The standard by which a waiver is granted should be explicitly set forth in the Model and should set a high bar.

Furthermore, the conditions set forth for off-site treatment to meet do not adequately protect water quality. First, the conditions ignore the adverse impact to waters downstream from the project but upstream from the off-site treatment facility. As with the regional treatment

provisions of the Model, any off-site treatment facility must not use waters of the United States to transport untreated runoff from a project site. Furthermore, the Model must also specify that no waiver may be issued where doing so will result in causing or contributing to an exceedance of water quality standards. Lastly, the Model should specify that the Executive Officer of the Regional Board should be notified of any waiver within 5 days of the waiver being issued. Such notice should include a copy of the waiver documentation and the Project WQMP. This will provide a check on the permitting agency and ensure independent review of the propriety of any waiver that is granted.

Section 3 (Regional-Based Water Quality Control):

Regional treatment facilities, while an appealing solution, should only be relied on where greater benefits arise from the use of a regional treatment facility. For example, regional treatment should be considered only where such treatment exceeds the water quality solution that can be provided onsite.

More specifically, certain conditions set forth as requirements for approval of the use of regional treatment inadequately protect of water quality. For instance, the condition that specifies that there must be adequate capacity in the regionally-based BMP is ambiguous. That condition should be strengthened to define exactly what is "adequate" capacity. For instance, the Model state that adequate capacity exists if the regional BMP is designed to treat more than the cumulative volume (or flow) of runoff from all new development or significant redevelopment projects included in the regional or watershed plan. Likewise, the condition that the regionally-based treatment BMP "address" the project's pollutants of concern leaves it unstated that effluent from the treatment BMP must not cause or contribute to an exceedance of receiving water quality standards, as required by the Permit. Given the multiple analytical dimensions associated with approving the use of regional treatment facilities, public input should be required, either at the level of the permittee or at the regional board level.

In addition, the approach taken in Orange County should be adopted here: namely, because of the significance of any approval of a regional facility and the relative lack of standards set forth in the Model, the Executive Officer should approve any facility as a condition precedent to any waiver of site-specific SUSMP requirements in reliance on the regional facility.

Attachment A:

The Permit requires that the County seek public input in developing the Model. *See* Permit ¶ 1.11. Yet this is the first opportunity that the public has had to comment on the WQMP Template that the County attaches as Attachment A. This template was absent from the version of the Model that the County previously made available for public review and comment. Given that this Attachment, which represents a template for project WQMPs, is critical to the proper implementation of the Model, the comments below, which range from addressing minor corrections to critical substantive omissions, *must* be directly addressed by the County prior to Regional Board approval of the Model.

- Scattered throughout Attachment A are references to "Priority" projects (pp. A-4, A-6, A-8). The Model never mentions "priority" projects. Such references should be deleted.
- Section 2 is currently entitled "Pollutant Identification" and discusses only pollutants of concern, ignoring hydrologic conditions of concern. As set forth in Section 2.2.2 of the model, such hydrologic conditions of concern must be identified and addressed in the project WQMP. Section 2 of the template, therefore, should be re-titled "Impact Identification" and should include a subsection that discusses the required hydrologic and cumulative impact analysis that must be performed by the project applicant.
- The table in Section 3.1 is entitled "Site Design and Source Control BMP Selection Matrix." As discussed above, this creates confusion regarding the distinction between site design and source control BMPs.
- Section 3.3 states that treatment control BMPs must be selected with respect to identified pollutants. Such BMPs should also be selected with respect to the identified hydrologic conditions of concern.

Attachment C:

Attachment C contains a discussion of pollutants of concerns. As it stands, the discussion is relatively cursory. NRDC and Defend the Bay recommend that at the least, pathogens and coliform be replaced with bacteria and viruses in order to conform to the language used in the rest of the Model. The discussion of metals can be made more robust, including a discussion of the sources of metals. The discussion of nutrients has a spurious "is" in the second sentence that should be deleted. The discussion of pesticides should mention that part of the root of the problem associated with pesticides is excess or improper application. The discussion of organic compounds should specify the manner in which these compounds often enter the environment, such as by rinsing off objects. The discussion of oxygen-demanding substances should specify that proteins, carbohydrates, and fats are examples of biodegradable organic compounds, and that ammonia and hydrogen sulfide are examples of oxygen-demanding compounds.

Attachment D:

Attachment D purports to provide local rainfall curves as required by the Permit. As the Attachment acknowledges, however, the rainfall curves do not represent those for San Bernardino County, but that these curves are under development. The Board should require that the County be specific about its plans to develop these curves, such as requiring specific dates by which the analysis will be complete.

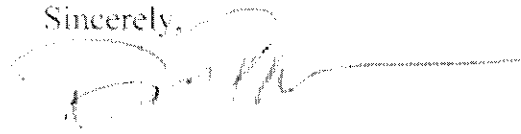
* * *

Mr. Milasol Gaslan
Mr. Matt Yeager
Comments re: San Bernardino Model
WQMP February 12, 2004
Page 8

Thank you for considering our comments. Given that the Model WQMP sets the groundwork for implementing the provisions of the San Bernardino County Stormwater Permit, the Model must provide useful and specific criteria to ensure that threats to water quality from new development and significant redevelopment are reduced. As is evidenced by the comments above, the County's efforts have so far fallen short. Accordingly, we suggest that the Board require the County to incorporate these comments.

As a final comment, NRDC and Defend the Bay would like to emphasize that it is nearly impossible to definitively judge the County's program until the County submits the associated DAMP and any other adjunct documents that might be produced related to the County's overall program. For instance, it would be highly appropriate for the County to attach a set of definitions to the Model to define such terms as "waters of the United States," etc. Consideration of the Model WQMP at this time, in isolation from these other documents, therefore cannot be complete.

Sincerely,



David S. Beckman
Dan Gildor
Natural Resources Defense Council and
Defend the Bay

cc: Mr. Robert Caustin, Defend the Bay

(Comments from CICWQ)

February 13, 2004

VIA: **US MAIL**

E-MAIL: mgaslan@rb8.swrcb.ca.gov; myeager@dpw.sbcounty.gov

Milasol Gaslan
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street
Riverside, CA 92501-3348

Water Quality Management Plan (WQMP) for San Bernardino County Areas

Dear Ms. Gaslan:

On behalf of the more than 3,300 member companies of the Construction Industry Coalition on Water Quality (CICWQ), we would like to thank the Santa Ana Regional Water Quality Control Board (Regional Board) for this opportunity to express our concerns with the draft Water Quality Management Plan (WQMP).

CICWQ is comprised of the four major construction and building industry trade associations in Southern California. These include the Associated General Contractors of California (AGC), the Building Industry Association of Southern California (BIA/SC), the Engineering Contractors Association (ECA) and the Southern California Contractors Association (SCCA). These organizations work collectively to provide the necessary infrastructure and support for the region's business and residential needs.

The membership of CICWQ is comprised of construction contractors, labor unions, landowners, developers, and homebuilders throughout the region and state. All segments of the coalition are impacted by the draft WQMP, including construction employees who rely on jobs in the region, landowners within the Board's San Bernardino County jurisdictional boundaries and potential builders who require land resources to satisfy the ever-growing demand for housing.

CICWQ is very supportive of the Regional Board's efforts to develop new ways for enhancing our quality of life through improved water quality. However, the building and construction industries want to ensure that these efforts are practicable, achievable and will result in improved water quality.

Based on the foregoing, we ask that you consider the following comments pertaining to the draft WQMP and that you work with CICWQ to find solutions that will protect jobs, housing and water quality for the residents in our region.

Executive Summary

Page E-1 second paragraph states the following:

An effective and acceptable program will require that sponsors of covered development and redevelopment projects develop and implement a project-specific Water Quality Management Plan (WQMP) that meets the following requirements:

- *The pollutants in post-development runoff shall be reduced using controls that utilize best available technology (BAT) and best conventional technology (BCT).*

Comment: The MEP standard is the applicable standard for post-construction discharges from development. This issue was addressed during the Orange County WQMP debate and it was settled with BAT/BCT language being dropped from the Model WQMP. There is no reason for the San Bernardino WQMP to be different than the Orange County WQMP on this issue.

Section 2 WQMP Contents

1. Section 2.1 Project Information and Certification (fifth bullet) requires the following:

A signed statement (with date) certifying that the provisions of the WQMP have been accepted by the applicant and that the applicant will have the plan carried out by future successors (transferability statement).

Comment: The last part of this requirement is not feasible. The applicant may be able to verify maintenance acceptance from the first buyer, but beyond that has no control over ongoing maintenance. Therefore, the signed statement should be for acceptance of maintenance until it is transferred to the first buyer.

2. Section 2.3.1 Site Design and Source Control BMPs states the following:

The following site design and source control BMPs must be implemented for all projects.

Comment: Many of the required BMPs listed in Table 2-2 may not be feasible or applicable to a given site. Therefore, the discussion of BMPs should be written such that a combination of site design, source control, and treatment control BMPs or regional or watershed-based programs that adequately address all identified pollutants and hydrologic conditions of concern is required. This is the wording that is used in the Orange County WQMP and provides the necessary flexibility to choose and implement the most effective combination of BMPs applicable to a certain project, without being mandated to implement a particular BMP, such as pervious pavement. The description of the various types of BMPs listed in the WQMP can then be used by the applicants as potential BMPs available to help meet the conditions of concern.

3. Section 2.3.1 Vehicle Washing Areas states the following:

In multi-family developments, and in developments having a common parking area, a designated car wash area where car washing or rinsing is not specifically prohibited via CC&Rs or other acceptable means, and in developments having a common parking area where car washing or rinsing is not specifically prohibited via CC&Rs or other acceptable means, a designated car washing area and rinsing area that does not drain directly to a storm drain shall be provided for common usage. Wash waters and rinse waters from

this area must either be directed to the sanitary sewer (with prior approval of the sewerage agency), to an engineered filtration system, or an equally effective alternative.

Comment: The requirement to have multifamily developments provide a designated car wash area for common usage is way beyond the intent of the Permit and is infeasible, especially considering that multifamily developments are critical to help alleviate the housing supply and affordability crisis. It seems that this requirement would impose an environmental justice issue for certain areas. This is due to the increased cost, ultimately assumed by the homeowner, associated with installation and maintenance of a designated car wash area or with having to take their vehicles to a commercial car wash.

4. Section 2.3.3 Treatment Control BMP Design Criteria states the following:

The obligation to install Treatment Control BMPs at new development sites is met if for a common scheme of development; BMPs are constructed with the requisite capacity to serve the entire common scheme, even if certain phases of the common scheme may not have BMP capacity located on that phase. BMP capacity must be functional before any phased work begins, thus may not be added on at the end of phased development.

Comment: This is not consistent with the wording of the Permit and should therefore be changed such that it is consistent with the Permit. The Permit does not contain the last sentence in its requirements. In addition, the adopted Orange County WQMP states that “The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use” and “Interim stormwater Treatment BMPs that provide equivalent or greater treatment than is required by this section may be implemented by a dependent development until each shared BMP is operational.” The San Bernardino WQMP should take the same approach to this issue.

5. Sections 2.3.3.1 and 2.3.3.2 Identify the drainage area states the following:

This includes all areas that will contribute runoff to the proposed BMP, including pervious areas, impervious areas, and off-site areas, whether or not they are directly or indirectly connected to the BMP.

Comment: It is not the requirement of the project proponent to treat the off-site areas of their development. This requirement is also not specified in the Permit or in the Orange County WQMP. The off-site area requirement should be deleted from the drainage area calculations for flow-based and volume-based design.

6. Section 2.4 Operations and Maintenance states the following:

Operation and maintenance (O&M) requirements for all Source Control and Treatment Control BMPs shall be identified within the WQMP. The WQMP shall include the following:

- *Identification of each BMP that requires O&M*
- *Thorough description of O&M activities, the O&M process, and the handling and placement of any wastes*

- *BMP start-up dates*
- *Schedule of the frequency of O&M for each BMP*
- *Identification of the responsible parties for O&M, including a written agreement with the entities responsible for O&M*
- *Self-inspections and record keeping requirements for BMPs (review local specific requirements regarding self-inspections and/or annual reporting), including identification of responsible parties for inspection and record keeping*
- *Thorough descriptions of water quality monitoring (if locally required)*
- *Signed statement (with date) accepting responsibility for maintenance, repair, replacement, and inspection of BMPs. O&M requirements must be transferred to future site owners as described in Section 4.2.*
- *Local jurisdiction should have authority to maintain the BMP, if necessary, and invoice the owner for costs.*

Comment: These requirements are above and beyond the intent of the Permit. The Permit requires that the WQMP identify the responsible party for maintenance of the treatment systems, and a funding source or sources for its operation and maintenance. It does require all of the above listed requirements and therefore they should be deleted or revised to meet the intent of the Permit.

7. Section 3 Regional-Based Water Quality Control states the following:

For watersheds, sub-watersheds, drainage areas and other areas covered by a comprehensive master plan of drainage and water quality control approved by the Agency since April 26, 2002, regionally-based treatment control BMPs are an alternative approach to on-site Treatment Control BMP implementation. Regionally-based BMPs may provide a more effective and cost efficient runoff treatment control mechanism for multiple new development and redevelopment projects within the area covered by the comprehensive master plan of drainage and water quality. When regionally-based BMPs are utilized, the development and redevelopment project must continue to implement site design and source control BMPs. Regionally-based treatment control BMPs can treat stormwater from several source areas at a single or multiple downstream location(s). This approach can be effective when limited space is available for structural BMPs in development and redevelopment areas.

Regionally-based treatment control BMPs will be considered for acceptance by the Agency as an alternative to on-site measures if the project applicant demonstrates the following:

Comment: It is good to see that the Regional Treatment option is offered as an alternative, but is should actually be encouraged as is the case with the Permit and the Orange County WQMP. In addition, this section seems to only focus on master-planned and multiple developments. The idea of regional-based water quality control is to look at the watersheds as a whole and determine

where it is more economical and feasible to remove the pollutants on a regional-scale as opposed to an on-site scale. This will entail the involvement of the municipalities as well as the development community. As you know, Brown and Caldwell's April 2003 study entitled, "Regional Solutions for Treating Stormwater in Los Angeles County: A Macrofeasibility Study", provides that regional mitigation facilities have the following goals and benefits:

1. Water Quality Improvements
 - a. Treat storm water from existing development as well as new development and redevelopment
 - b. Regional, or watershed, facilities can be optimally located and sized to reduce pollutant loads from all tributary areas
 - c. Regional, or watershed, facilities can address both dry-weather flows and wet-weather flows
 - d. Regional, or watershed, facilities can enhance water quality to a greater degree by providing larger areas for more highly effective, land-intensive treatment methods, such as filtration technologies
 - e. Regional, or watershed, facilities can be more easily upgraded to meet future water quality regulations
 - f. Regional, or watershed facilities treat an entire sub-watershed and not just new development, or redevelopment, thus overall improvements in water quality can be realized more quickly
2. Cost-effectiveness
 - a. Regional, or watershed facilities are inherently more cost-effective to construct and maintain
 - b. Economies of scale enable greater pollutant reductions for the capital and ongoing operation and maintenance costs expended.
3. Long-term Maintenance
 - a. Surveys of maintenance effective of on-site facilities on private land have shown that the majority were failing due to lack of maintenance
 - b. Regional, or watershed facilities have a much higher likelihood of being maintained properly so they operate in perpetuity
4. Beneficial reuse of stormwater
 - a. Urban runoff is increasingly being viewed as a potential resource, especially given the water supply challenges that California currently faces
 - b. Regional, or watershed facilities offer the flexibility for future enhancements that would support integrated resource planning and make better overall use of limited water supplies
5. Multiple uses
 - a. Because of their larger size and jurisdiction, regional, or watershed facilities present more opportunities to serve multiple purposes
 - b. Regional, or watershed, facilities can often provide other values, such as, habitat improvements, public park and/or recreation facility creation or enhancement, and green space preservation

Therefore, we suggest starting with the wording on this topic from the Orange County WQMP and editing as is appropriate for the differences between San Bernardino County and Orange County.

8. **Section 4 Changes in Site Development or Ownership** states the following:

4.2 Changes in Site Ownership

For sites with a fully implemented WQMP, the WQMP requirements shall transfer to all future owners of the project site. Recording the WQMP requirements against the title to the property is one way to effectively notify potential buyers and future owners of properties of their responsibilities for the WQMP. New owners have the option to adopt the existing WQMP, to amend the WQMP, or to develop a new WQMP. If the WQMP is amended or if a new WQMP is developed, the amended or new WQMP must be in accordance with this guidance document, must address cumulative changes to the project site, and must be submitted to the Agency for approval.

Comment: This requirement is above and beyond the intent of the Permit and is infeasible to try to implement. It is unreasonable to expect the complete WQMP to be recorded against the title. Besides, it is unclear what happens to the WQMP when this WQMP guidance document is updated or a regional BMP is put in place or if it is determined that the BMPs installed on the property are unnecessary. In addition, I don't think that the Agency, the elected officials or the public want to see WQMPs submitted for approval before a property transfer can occur. This requirement is not included in any MS4 permits or WQMPs that we are aware of and should not be included in this one. The transfer of responsibility for the treatment control BMP is already addressed and there is no need for this over burdensome bureaucratic nightmare.

Conclusion:

Based upon the foregoing, we respectfully request that you consider the ramifications of having the Santa Ana Regional Water Quality Control Board adopt the proposed WQMP in its current format. We have raised many issues that should be thoughtfully reviewed and addressed. We are very willing to discuss these issues in more detail at any time.

The stakes are high, especially given California's economic crisis. The absence of meaningful consideration of these issues will have a major impact on affordable housing, jobs, wages and livability.

We are confident that, by working together, CICWQ can assist you in achieving balance that will greatly improve water quality while also meeting our other regional obligations and needs. We thank you for your consideration of our comments.

If you have any questions, please feel free to contact me at (909) 396-9993 or tpiasky@biasc.org.

Respectfully,

Tim Piasky
Director of Environmental Affairs

cc. Matt Yeager

(Comments from the City of Ontario)

ENGINEERING DEPARTMENT

February 13, 2004

Ms. Milasol Gaslan
California Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3339

SUBJECT: COMMENTS ON THE SAN BERNARDINO COUNTY MODEL WATER QUALITY MANAGEMENT PLAN GUIDANCE DOCUMENT

I hereby submit the following comments for the City of Ontario and recommend that the following revisions be made to the Model Water Quality Management Plan Guidance Final Draft document.

Section 1.2, page 1-2, Table 1-1 (item #4.) This statement should be revised to clearly state “Automotive Repair Shops, *Auto Body Shops, Auto Parts Stores and Gasoline Service Stations* (with SIC codes 5013, 5014,5541, 7532-7534, 7536-7539).

Section 1.3, page 1-3, top paragraph, first line. “A-1, A-2 and” should be removed from this sentence. In order to determine if a WQMP is necessary for a project, the developer should only have to fill out page A-3!

Section 2.2.1, page 2-2, Table 2-1, last column heading. Should read “Parking Lots (>5,000 ft²)” not (5,00 ft²)

Section 2.3.1, page 2-7, Design BMPs, Landscape Planning, line 6. What are “County Administrative Design Guidelines”? I am not familiar with what these are. Our resident Landscape Architect tells me that there is no such thing for San Bernardino County and that there is only an Assembly Bill that specifies how landscape design and water conserving irrigation should be installed. I will get the assembly bill number for this requirement and will supply it when we meet next.

Section 2.3.1, page 2-7, Storm Drain Signage. The existing text under this item is acceptable but additional text should be added that states “ *The legibility of storm drain inlet markers and signs must be maintained by the property owner, POA or HOA and the responsible party should enter into a maintenance agreement with the City or County to record a deed restriction upon the property title to maintain the legibility of placards or signs.*”

Section 2.3.1, Areas and Activity Control BMPs, Fueling Areas, page 2-8. A third paragraph should be added under this section stating “*For fuel spillage outside the fuel dispensing area, a*

stormwater clarifier should be installed uphill or upstream of any on-site storm drain inlets or installed to treat surface flows from the property before entering a storm drain for the following reasons: 1) To prevent fuel spills from entering the storm drain system directly. 2) For treatment of residual fuels and oils in from paved areas of the site."

Section 2.3.1, Areas and Activity Control BMPs, Maintenance Bays and Docks, page 2-9. The first sentence of the first paragraph should read "*Maintenance Bays, loading docks and truck wells must be kept in a clean and orderly condition...*" The first sentence of the second paragraph should be revised to say "*Maintenance bays and loading dock areas should be covered and drainage from adjoining roofs and pavements diverted around them.*" The last sentence of this paragraph has a typo where it says "should drain through water quality inlets, or to an d engineered infiltration system..." - remove the "d" from "and" in this sentence.

Section 2.3.1, Areas and Activity Control BMPs, Trash Storage Areas and Litter Control, page 2-9. Revise the 3rd sentence of the first paragraph under this section to read, "For trash container areas associated with fuel dispensing , vehicle repair/maintenance, industry, *grocery stores and multi-family residential uses such as apartments, condominiums or mobile home parks*, grade and pave the area to eliminate or reduce run-on of storm water to the maximum extent practicable *and construct a solid roof over the enclosure. Food Service business trash enclosures should also be roofed and have a center-sloped drain installed in the enclosure floor with connection to a sanitary sewer.* The City of Ontario recommends requiring roofs over these type of trash enclosures for the following reasons: 1) Trash dumpster lids are usually flipped back and not covering the container; 2) A solid roof would prevent rain from getting into trash bin, causing leakage of contaminated storm water out of the trash container and out of trash trucks; 3) To prevent bacteria from food waste and litter that has fallen on the ground inside of the trash enclosure from washing into the storm drain system; 4) To prevent abandoned hazardous waste often found near trash enclosures from washing into the storm drain system.

Preceding the first sentence of the 2nd paragraph under this same section a sentence should be added that reads, "*All property owners are required to control trash accumulation and litter on their property through regularly scheduled sweeping, landscape maintenance and trash pickup.*" For developments with POAs, the POA must be required to

Section 2.3.1, Areas and Activity Control BMPs, Vehicle Washing Areas, page 2-9 and 2-10. In the second paragraph, first line, the word business should be pluralized to "*businesses*". The third sentence of this same paragraph should be revised to say: "*Where steam cleaning occurs, provide wash racks connected to sewer via a sand and oil interceptor and/or structurally contain ...*" .

Section 2.3.1, Areas and Activity Control BMPs, Outdoor Material and Chemical Storage Areas, page 2-10. Revise the first sentence to read: "*Where plans propose outdoor storage of materials or containers for oils, solvents, ...*" Add the following verbage to the end of the first sentence "*and a solid roof or cover to prevent the accumulation stormwater inside the containment structure.*"

Section 2.3.1, Areas and Activity Control BMPs, Outdoor Work Areas, page 2-10. I feel that this whole paragraph under Outdoor Work Areas should be struck from this document due to the fact that all regular outdoor processing , repair , manufacturing, etc. should be done inside of a roofed building.

Section 2.3.1, Areas and Activity Control BMPs, Outdoor Processing Areas, page 2-10. The first sentence should be revised to read: "Where wet material processing occurs (e.g., electroplating), *a roof shall be installed to cover the area and* secondary containment structures shall be provided ..."

Section 2.3.1, Areas and Activity Control BMPs, page 2-10, Add a new section entitled "Outdoor Equipment and Parts Storage Areas", with a paragraph like " *Where equipment or parts of equipment are stored outside, a roof or cover shall be provided where the equipment contains oils, grease, chemicals, or is covered with oily deposits, sediment or other materials which could contaminate stormwater.*"

Section 2.3.1, Areas and Activity Control BMPs, Street Sweeping Private Streets and Parking Lots page 2-10. Preceding the first sentence of this paragraph under this section, a sentence should be added that reads, "*All property owners shall sweep and maintain paved areas of their property to effectively control and reduce the amount of sediment, landscaping waste and trash from entering a Municipal Separate Storm Sewer System (MS4).*" The second sentence should also be revised to read "For developments with POAs and privately owned streets and parking lots, the streets and parking lots must be swept at least *monthly during the rainy season and once during the dry season to control debris from entering a MS4 annually to reduce the amount of sediment, garden waste, and trash from entering the storm drain.*"

Section 2.3.1, Areas and Activity Control BMPs, Building and Grounds Maintenance, page 2-10.

Add a new subsection under this section of the document with verbage like "The property owner or POA will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by preventing the discharge of washwater, rinsewater, following approved landscape management practices, preventing and cleaning up spills immediately, keeping trash, waste materials and debris from entering the storm drains and maintaining the stormwater collection system."

Section 2.3.2 Site Design BMPs, page 2-11. I am concerned about the way that the first sentence under this section is stated. It says "Projects for which hydrologic conditions of concern have been identified shall control post-development peak stormwater runoff discharge rates and velocities to protect stream habitat and to prevent downstream erosion and sedimentation." What about if there are no hydrologic concerns for a project? Let's say there is plenty of capacity in the downstream concrete channel storm drain. Do we just waive this requirement? I think that this statement will allow many developers to challenge us on the requirement to install stormwater infiltration swales, etc. as part of the development plan. Perhaps we should restate this sentence to require that pervious areas of the site be used to the maximum extent practicable for infiltration of runoff from building and pavement areas.

Section 2.3.3 Treatment Control BMPs, Retention/Irrigation, page 2-16. Need period at end of this paragraph.

Attachment A, WQMP Template, page A-4. Item #1 on this page “All significant re-development projects.” The term “SUSMPs” in the 7th line of this paragraph should be replaced by “a WQMP”

Attachment A, WQMP Template, Section 3, Best Management Practice Selection Process, page A-6. The priority project category at the bottom row of the table for Source Control BMPs needs to be revised to read: “Parking Lots >5,000 ft² ~~2,500~~ of exposed storm water” .

Attachment A, WQMP Template, Treatment Control BMP Selection Matrix, page A-8. The priority project category at the bottom row of the table for Treatment Control BMPs needs to be revised to read: “Parking Lots >5,000 ft² ~~2,500~~ of exposed storm water”.

If you have any questions in regards to these recommendations, please call me at (909) 395-2389.

Sincerely,

Steve Wilson
Environmental Water/Waste Water Engineer

SW:cp
Enclosures

c: Matt Yeager, San Bernardino County Storm Water Program